AMENDMENTS TO THE DRAWINGS

The attached drawing sheet includes a change to FIG. 1. This sheet, which includes FIG. 1, replaces the original sheet FIG. 1.

Attachment: Replacement Sheet

REMARKS

Claims 1- 18 are pending in the application. Claims 1-10 stand rejected. Claims 11-18 have been withdrawn from consideration after being subject to a requirement for restriction/election. Claims 1, 2, 3, 5, 6 and 9 are amended, claims 4, 7 and 8 are canceled and new claims 19-23 are added in this response.

Election/Restriction

In the Office Action, the Examiner stated that Applicant's election with traverse of claims 1 - 10 was on the grounds that claim 11 recites a method of electronic registration using multiple channels, which includes performing an edge detection operation and that neither claim 11 nor claims dependent thereon recite the use of "edge channel detection."

Applicants' disagree with the Examiner's contention. As stated in response to the September 19, 2007 requirement for restriction and election, Applicants provisionally elected claims 1-10 with traverse on the grounds that the species defined by the Examiner are not directed to mutually exclusive characteristics.

More specifically, originally filed claim 11 and its dependent claims are directed to electronic registration using multiple channels, one possible use for a method of automatically detecting registration parameters for a selected backing surface. As Applicants' also noted, while claim 1 recites receiving "image data," the methods recited in claim 11 and its dependents recite receiving "scanned" image data- a specific type of image data that may be received by a method such as that recited in claim 1 and further, while methods such as those recited in claim 1 may generally be used to identify characteristics that are identifiable by gray level differences, claim 11 is more narrowly directed to detecting a document edge.

Accordingly, Applicants do not agree with the Examiner's conclusion that originally filed claims 1-10 and 11-18 are directed to mutually exclusive characteristics.

In the Drawings

FIG. 1 has been amended to include reference number "10" as requested by the Examiner. As disclosed in the originally filed specification, the number "10" references an exemplary imaging system. No new matter has been added.

In the Specification

The specification has been amended to clarify the text and to correct minor grammatical and typographical errors. No new matter has been added.

Claim Objections

The Examiner has objected to claim 1, requesting correcting of a grammatical error in line 6 and has also objected to claim 3, stating that it is unclear as to what is being distinctly claimed. Claims 1 and 3 have been amended and are now believed to be in condition for allowance.

Claim Rejections - 35 USC § 101

The Examiner rejected claims 1 - 9 under 35 U.S.C. §101, stating that the claims are directed to non-statutory subject matter in that they "merely manipulate[s] data without ever producing a useful, concrete and tangible result." According to the Examiner, the claimed method recites steps of "receiving", "determining", and "selecting" with a lack of physical structure and thus, does not produce a real-world result as required to meet the tangibility requirement.

Claim 1 has been amended to state identifying a relative positioning of a captured image data pixel, i.e., identifying whether the pixel represents a portion of the captured image that lies inside or outside the edges of the document, and is believed to be allowable. This use of the method is described in the originally filed specification (see e.g., paragraph 34) and no new matter has been added. The amendment to claim 1 is also applied to claims 2- 9, dependent thereon and thus, claims 2- 9 are also believed to be allowable.

Claim Rejections - 35 USC § 103

The Examiner rejected claim 1 under 35 U.S.C. 103(a) as being unpatentable over Buchar et al. (US 2002/0126299 A1) in view of Kojima et al. (US 6,345,116 B1).

According to the Examiner Buchar discloses all of the steps of originally filed claim 1 except for receiving image data including chrominance values. However, the Examiner has stated that Kojima teaches image data that comprises chrominance values and that it would have been obvious to one of ordinary skill in the art at the time the invention was made for the image data of Buchar to include chrominance values as taught by Kojima.

Present systems and methods are directed to a scanning system that uses chrominance information, either alone or in combination with gray level information, to determine one or more registration parameters used in document edge detection (Abstract). As explained in the specification, Applicants' methods are directed to automatically detecting registration parameters. Such methods may be useful, for example, in a reproduction system with readily detachable scanner backing skis, which allows a user to select an appropriate backing for a given application (¶22).

Specifically, the method of claim 1 recites receiving image data representing the backing surface, wherein the image data includes (but not is not limited to) ***chrominance values*** in multiple channels. The method further recites using these chrominance values in various calculations to determine a registration parameter. In one aspect, the claimed method can be used to determine the Black Average (BAR), White Average (WAR), and/or Step Change (SCR) registration parameters that are currently used to detect transitions between black and white (i.e., backing and document) pixels (¶40,41).

Buchar

In contrast, as the Examiner has acknowledged (see e.g., 11/05/2007 Office Action at ¶11), Buchar is directed to using gray level ***i.e., luminance*** information to determine edge detection registration parameters.

According to Buchar, scanning the backing/ski "provides the ***gray level value*** P of each pixel in the scanline for each channel (e.g., Red, Green, Blue) for the ski installed in the scanner" (¶31). These gray level/luminance values are then used in various calculations to determine registration parameters (¶¶32- 39).

Kojima

Kojima discloses reducing memory costs by converting color image data into luminance image data and chrominance image data and processing only the luminance data (col. 15, lines 29-38; col. 16, lines 8-41; col. 17, lines 55-66). Kojima does not teach or suggest using chrominance data to detect registration parameters or for any other purpose relating to document registration.

Applicants note further that Buchar does not teach or suggest that the use of chrominance data could be a viable substitute for the use of luminance data in the method disclosed and in fact, Kojima's teaches away from such a suggestion by disclosing that chrominance data should be discarded in order to reduce memory.

Claim 1 is believed to be in condition for allowance for the reasons set forth above. Applicants note that while the Examiner applied argued against the patentability of claims 2- 9 in view of Buchar and Kojima, only claim 1 has been rejected. In any event, claims 2- 9 are dependent upon claim 1 and are believed to be allowable because claim 1 is allowable.

In the event there are any remaining questions or issues to address after receipt of this paper or if personal contact would be advantageous to the disposition of this case, the Examiner is requested to call Michelle Waites, at (212) 716-4121.

Respectfully submitted,

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